MTC 2002.1 (37-21(53264)B)

Art Unit 1651



Application of Muhammad Anzar et al. Serial No. 10/811,593 Filed March 29, 2004 Confirmation No. 2857

PROCESS FOR THE STAINING OF SPERM

September 22, 2004

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SIR:

INFORMATION DISCLOSURE STATEMENT

In accordance with 37 C.F.R. 1.97 and 1.98 and MPEP 609, and in compliance with the duty of disclosure set forth in 37 C.F.R. 1.56, applicants submit copies of the references listed on the attached PTO/SB/08A for consideration by the Patent and Trademark Office in the above-entitled application and to be made of record therein.

This Information Disclosure Statement is being submitted pursuant to 37 C.F.R. 1.97(b) in that applicants believe that it is being filed before the mailing date of the first Office action on the merits. Accordingly, neither a statement nor fee under 37 C.F.R. 1.97(c) is required. If applicants are mistaken, and the mailing date of the first Office action on the merits precedes the filing of this Information Disclosure Statement, Applicant authorizes the Commissioner to charge the fee due under 37 C.F.R. 1.17(p) to Deposit Account No. 19-1345.

Respectfully submitted,

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4	TPE U	FORMATION	DISC	LOSURE	Application Number	10/811,593	
	Š	TEMENT B	Y AP	PLICANT	Filing Date	March 29, 2004	
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থ	PADEN	Paneway.			First Named Inventor	Muhammad Anzar et al.	
	· ·				Group Art Unit	1651	
	_			Examiner Name	TBD		
	Sheet	Sheet 1 of 4		Attorney Docket No.	MTC 2002.1 (37- 21(53264)B)		

		U.S.	PATENT	DOCUMENTS		
	U.S. Patent Document		nt		Date of Publication of Cited Document MM-DD-YYYY	
Examiner Initials*	Cite No. ¹	Number Kir Co (if kno		Name of Patentee or Applicant of Cited Document		
	1 4,362,246		Adair	12-07-1982		
	2 5,135,759 A		Α	Johnson et al.	08-04-1992	
	3	5,658,751	Α	Yue et al.	08-19-1997	
	4	5,798,276	Α	Haugland et al.	08-25-1998	
	5	5,985,216	Α	Rens et al.	11-16-1999	
	6	6,071,689	А	Seidel et al.	06-06-2000	
	7	6,130,034	Α	Aitken	10-10-2000	
	8	6,149,867	А	Seidel et al.	11-21-2000	
	9	6,263,745	B1	Buchanan et al.	07-24-2001	
	10	6,368,786	B1	Saint-Ramon et al.	04-08-2002	
	11	6,372,422	А	Seidel et al.	04-16-2002	
	12	6,395,305	B1	Buhr et al.	05-28-2002	
	13	6,524,860	B1	Seidel et al.	02-25-2003	
	14	2002/0119558	A1	Seidel et al.	08-29-2002	

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	Date Considered

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¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁴Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached..

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			FORE	EIGN PATE	ENT DOCUMENTS			
		F	oreign Patent Doo	cument			f T ⁶	
Examiner Initials*	Cite No.1		Number⁴	Kind Code ² (if known)	Code ² Cited Document (if	Date of Publication of Cited Document MM-DD-YYYY		
	15	GB	2145112	Α	Milk Marketing Board	02-03-1985		
	16	wo	99/33956	A1	XY, Inc.	07-08-1999		
_	17 .	wo	00/54026 01/37655 01/51612 02/41906	A1	Hattings-KS	09-14-2000		
	18			A1	XY, Inc.	05-31-2001		
	19			А	Istituto Sperimentale Italian	07-19-2001		
	20	wo		A2	Pharmacia Corporation	05-30-2002		
	21	wo	02/043574	A3	Seidel et al.	06-06-2002		
		ОТН	IER ART - NO	N PATEN	T LITERATURE DOC	UMENTS		
Examiner Initials* Cite No.1 Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issent						date, page(s), volume-issue	г6	
	22				of Living Cells According to (25(7), pp. 585-589	Deoxyribonucleic Acid Content,"		
	D'Occhio, M., "Sexing of Sperm and Embryos: Use of Sexed Sperm in AI, IVF, ICSI and Graft," Animal Breeding Use of New Technologies, Chapter 19, pp. 247-264, Kinghorn, van der Werf and Ryan, Eds.,							
	24	Dresser et al., "Analyses of DNA Content of Living Spermatozoa Using Flow Cytometry Techniques," Jour. Reprod. and Fert., 1993, 93, pp. 357-365						
	25	Ericsso a New	n et al., "Flow Cyte Antiobiotic Combir	ometric Evalua nation," Therio	ation of Cryopreserved Bovine genology, 1990, 33(6), pp. 12	e Spermatozoa Processed Using 211-1220		
Examiner Signature					Date Considered		10.00	

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1				Group Art Unit	1651		
			Examiner Name	TBD			
Sheet	Sheet 3 of 4		Attorney Docket No.	MTC 2002.1 (37- 21(53264)B)			

 26	Farrell et al., "Quantification of Bull Sperm Characteristics Measured by Computer-Assisted Sperm Analysis (CASA) and the Relationship of Fertility," Theriogenology, 1998, 49(4), pp. 871-879
27	Foote et al., "Motility and Fertility of Bull Sperm in Whole Milk Extender Containing Antioxidants," Animal Repro. Sci., 2002, 71(1-2), pp. 13-23
28	Garner et al., "Viability Assessment of Mammalian Sperm Using SYBR-14 and Propidium Iodide," Bio. of Reprod, 1995, 53, pp. 276-284
29	Gordon et al., "Genetic Transformation of Mouse Embryos by Microinjection of Purified DNA," Proc. Natl. Acad. Sci., 1980, 77(12), pp. 7380-7384
30	Guthrie et al., "Flow Cytometric Sperm Sorting: Effects of Varying laser Power on Embryo Development in Swine," Mol. Reprod. and Develop., 2002, 61(1), pp. 87-92
31	Johnson et al., "Modification of a Laser-Based Flow Cytometry for High-Resolution DNA Analysis of Mammalian Spermatozoa," Cytometry, 1986, 7, pp. 268-273
32	Johnson, L.A., "Sex Preselection in Swine: Altered Sex Ratios in Offspring following Surgical Insemination of Flow Sorted X- and Y-Bearing Sperm," Reprod. Dom. Anim., 1991, 26, pp. 309-314
33	Johnson, L.A., "Sex Preselection by Flow Cytometric Separation of X and Y Chromosome-Bearing Sperm Based on DNA Difference: A Review," Reproduction, Fertility and Development, 1995, 7(4), pp. 893-903
34	Johnson, L.A., "Advances in Gender Preselection in Swine," Jour. of Reprod. and Fert., Proceedings of the Fifth International Conference on Pig Reproduction, Suppl. 52, 1997, pp. 255-266
35	Johnson et al., "Enhanced Flow Cytometric Sorting of Mammalian X and Y Sperm: High Speed Sorting and Orienting Nozzle for Artificial Insemination," Theriogenology, 1998, 49(1), p. 361
36	Johnson et al., "Sex Preselection: High-Speed Flow Cytometric Sorting of X and Y Sperm for Maximum Efficiency," Theriogenology, 1999, 52, pp. 1323-1341
37	Johnson, L.A., "Sexing Mammalian Sperm for Production of Offspring: the state-of-the-art," Anim. Reprod. Sci., 2000, 60-61, pp. 93-107
38	Maxwell et al., "Chlortetracycline Abalysis of Boar Spermatozoa After Incubation, Flow Cytometric Sorting, Cooling, or Cryopreservation," Mol. Reprod. and Develop., 46, 1997 pp. 408-418
 39	Morell et al., "Sexing of Sperm by Flow Cytometry," The Veterinary Record, 1988, pp. 322-324

Examiner	Date	
Signature	Considered	

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1	•			Group Art Unit	1651
			Examiner Name	TBD	
Sheet	4	of	4	Attorney Docket No.	MTC 2002.1 (37- 21(53264)B)

40	Rath et al., "Production of Piglets Preselected for Sex Following In Vitro Fertilization with X and Y Chromosome-Bearing Spermatozoa Sorted by Flow Cytometry," Theriogenology, 1997, 47, pp. 795-800
41	Salisbury and Graves, "Substrate-free Epididymal-like Bovine Spermatozoa," J. Reprod. Fertil., 1963, 6, pp. 351-359
 42	Seidel et al., "Artificial Insemination of Heifers with Cooled, Unfrozen Sexed Semen," Theriogenology, 1998 49(1), p. 365
43	Seidel et al., "Insemination of Heifers with Sexed Sperm," Theriogenology, 1999, 52, pp. 1407-1420
44	Seidel et al., "Insemination of Heifers with Sexed Frozen or Sexed Liquid Semen," Website www.cvmbs.colostate.edu, Abstract, June 3, 1999, 2 pages
45	International Search Report for PCT/US2004/009903 dated 08/16/2004

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Examiner	Date	
Signature	Considered	
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